

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/759,312	01/19/2004	Brian John Melody	31433-57	8319	
7590 08/22/2005			EXAM	EXAMINER	
NEXSEN PRUET, LLC Post Office Box 10107 Greenville, SC 29603			NGUYE	NGUYEN, HA T	
			ART UNIT	PAPER NUMBER	
,			2812	-	
			DATE MAILED: 08/22/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/759,312	MELODY ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ha T. Nguyen	2812				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1)⊠ Responsive to communication(s) filed on <u>13 June</u> 2005.						
<u> </u>	action is non-final.					
	<u> </u>					
Disposition of Claims						
<ul> <li>4) ☐ Claim(s) 1-6 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5) ☐ Claim(s) is/are allowed.</li> <li>6) ☐ Claim(s) 1-6 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)	_					
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
2) ☐ Notice of Draitsperson's Patent Drawing Review (PTO-948)  3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date03-30 - 0 ≤		ratent Application (PTO-152)				

Art Unit: 2812

#### **DETAILED ACTION**

1. Applicants' amendment in response to the Office Action mailed April 6, 2005 has been entered and made of record.

## Claim Rejections - 35 USC § 112

- 2. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- The term "high" in claim 1, line 11 is a relative term, which renders the claim indefinite. The term "high" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claims 2-6 variously depend from claim 1, they are rejected for the same reason.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103 and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1 and 3-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino et al. (USPN 6236561, hereinafter "Ogino") in view of Hernandez (USPN 4594641) or Knecht et al. (USPN, hereinafter "Knecht").

Referring to Figs. 1A-8C and related text, Ogino discloses [Re claim 1] a method of of manufacturing a solid electrolytic capacitor, said method comprising: forming a solid electrolytic capacitor element 1; connecting the capacitor terminals to the capacitor element; and encapsulating the capacitor element and a portion of the capacitor terminals with a protective resin (See col. 3, line 36- col. 4, line 50).

But Ogino fails to disclose expressly applying a pre-coat resin to a portion of capacitor terminals; wherein said pre-coat resin is substantially rigid at ambient temperatures and flexible at high temperatures.

However, the missing limitations are well known in the art because Hernandez discloses these features (See col. 4, line 59- col. 5, line 32). A person of ordinary skill is motivated to modify Ogino with Hernandez to obtain a well-protected capacitor that can be automatically insertable (see Hernandez, col. 3, lines 36-41).

Knecht also discloses these features; and [Re claims 3-6] that the coating material can be applied by any suitable method known in the art, including using a wiper, a brush, a counter-rotating wheel assembly or by spraying (See col. 3, line 37-col. 5, line 12). A person of ordinary skill is motivated to modify Ogino with Knecht to obtain a well sealed capacitor.

Therefore, it would have been obvious to combine Ogino with Hernandez or Knecht to obtain the invention as specified in claims 1 and 3-6.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ogino in view of Hernandez or Knecht, as applied above, and further in view of Hayase et al. (USPN 6686085, hereinafter "Hayase").

The combined teaching of Ogino and Hernandez or Knecht discloses substantially the limitations of claim 2, as shown above.

But it fails to disclose expressly that the liquid epoxy resins contain lactone.

However, the missing limitation is well known in the art because discloses this feature (See example 29).

Application/Control Number: 10/759,312

Art Unit: 2812

A person of ordinary skill is motivated to modify Ogino and Hernandez or Knecht with Hayase to obtain an epoxy of desired consistency for a specific application .

Therefore, it would have been obvious to combine Ogino and Hernandez or Knecht with Hayase to obtain the invention as specified in claim 2.

#### Response to applicants' arguments

6. Applicants' arguments with respect to the rejections stated in the indicated Office Action have been fully considered but were not deemed persuasive for at least the following reasons.

Applicants argued that Knecht's teaching is opposite to the claimed invention because Knecht discloses a thermally resistant interlayer. The examiner disagreed. Knecht discloses a large selection of materials usable for an interlayer (see col. 3, lines 37-55), when not fully cured any of these materials would be rigid at ambient temperature but flexible at a higher temperature, this higher temperature would vary with the material used.

Applicants also argued that Hernandez does not teach the pre-coating step, the examiner disagreed, the capacitor terminals are portions of the lead-frame, which is covered with polymeric adhesive (equivalent to the claimed pre-coating resin), at least when it is not fully cured the adhesive is rigid at ambient temperature but flexible at a higher temperature.

Therefore the applied references do teach or make obvious all the limitations of the claimed invention.

### Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ha T. Nguyen whose telephone number is (571) 272-1678. The examiner can normally be reached on Monday-Friday from 8:30AM to 6:00PM, except the first Friday of each bi-week. The telephone number for Wednesday is (703) 560-0528.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael S. Lebentritt, can be reached on (571) 272-1873. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Art Unit: 2812

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ha Nguyen

**Primary Examiner** 

8-16-05